

U.S. Department of the Interior
Bureau of Land Management
White River Field Office
220 E Market St
Meeker, CO 81641

ENVIRONMENTAL ASSESSMENT

NUMBER: DOI-BLM-CO-110-2011-0085-EA

CASEFILE/PROJECT NUMBER: COD-052561

PROJECT NAME: Levison 8 and Levison 21X- Install New CO₂ and Water Injection Lines

LEGAL DESCRIPTION: T. 2 N., R. 102 W., Section 26, 6th PM

APPLICANT: Chevron USA, Inc.

ISSUES AND CONCERNS: None.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Background/Introduction: The White River Field Office (WRFO) received a Sundry Notice March 21, 2011 from Chevron USA, Inc for the installation of two new injection lines in the Rangely Weber Sand Unit. Both lines parallel an existing lease road for a majority of their proposed installation route, and there will be no new surface disturbance outside of the lease road right-of-way; the lines will be installed within the road borrow ditch, within 10 ft of the edge of the road. The water injection line (highlighted green in Fig. 2) for this project had a cultural resource survey performed March 16, 2011 and the portion of the CO₂ line that does not follow any existing disturbance (approximately 100 ft, highlighted pink in Fig. 2) had a cultural resource survey performed March 24, 2011; these surveys have been submitted to the WRFO.

Proposed Action: Chevron proposes to install two new injection lines, a CO₂ injection line and a water injection line, from Levison 8 (T2N, R102W, Section 26, NESW) to tie-in points along existing injection lines. The CO₂ line will run approximately 949 ft north of the location to the edge of Levison 21X, paralleling the disturbance of the existing lease road and well pad, then continue approximately 100 ft to a tie-in point just north of Levison 21X (see Figures 1 & 2). The CO₂ line will consist of 3 inch Schedule 40 Carbon steel pipe. The water line will run approximately 462 ft to a tie in point west of the location along an existing injection line and consist of 3 inch 2,500 psi fiberglass pipe for water. Both lines would be buried to 42 inches within a typical 40 ft right of way. See Table 1 for approximate acres disturbed.

Approximate duration of the pipeline installation will be eight months. In addition to mitigation that is provided in this document, the pipeline corridors will be reclaimed as per Chevron's

Surface Use Plan of Operations, Plan for Surface Reclamation of Pipeline Right-of-Way document (Attachment 1).

Table 1. Surface Disturbance Acreages

Name	Pipeline Length (ft)	Acres Disturbed ^a
CO ₂ Injection Line	949 ^b	0.31
	100	
Water Injection Line	462	0.42
Total		0.73

(a) Estimated acres disturbed based on a typical 40 ft ROW

(b) Based upon a 10 ft disturbance width. CO₂ line will be placed within 10 ft of an existing lease road and well pad which it follows for a majority of the route.

No Action Alternative: Under the No Action Alternative, the injection lines would not be installed. The Sundry Notice would be denied.

ALTERNATIVES CONSIDERED BUT NOT CARRIED FORWARD: None.

PURPOSE & NEED FOR THE ACTION:

The purpose of the action is to provide the opportunity to transport injection fluids across BLM surface. The need for the action is established under the authority of Federal Land Policy and Management Act of 1976 (FLPMA) to respond to the request to transport injection fluids across BLM surface.

Decision to be Made: The BLM will decide whether or not to approve the CO₂ and/or water injection line routes and installation, and if so, under what conditions.

PLAN CONFORMANCE REVIEW: The Proposed Action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3):

Name of Plan: White River Record of Decision and Approved Resource Management Plan (ROD/RMP).

Date Approved: July 1, 1997

Decision Number/Page: 2-5

Decision Language: Make federal oil and gas resources available for leasing and development in a manner that provides reasonable protection for other resource values.”

**AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES /
MITIGATION MEASURES:**

STANDARDS FOR PUBLIC LAND HEALTH: In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. These standards cover upland soils, riparian systems, plant and animal communities, threatened and endangered species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. Because a standard exists for these five categories, a finding must be made for each of them in an environmental analysis. These findings are located in specific elements listed below:

INTERDISCIPLINARY TEAM ANALYSIS RECORD CHECKLIST

The Proposed Action was presented to, and reviewed by the White River Field Office interdisciplinary team on 03/29/2011.

DETERMINATION OF STAFF:		
Determination	Resource	Rationale for Determination*
Natural, Biological and Cultural Resources		
NI	Air Quality	This is a relatively short pipeline segment and construction activities are not anticipated to generate emissions or dust to a degree that would be measurable. Emissions would only occur during construction activities and therefore would be short-term (less than 1 year).
PI	Soils	See discussion below.
PI	Wastes (hazardous or solid)	Installation and use of the pipelines have potential to result in the release of harmful chemicals at levels that could adversely affect human health or the environment.
PI	Water Quality (Surface/Ground)	See discussion below.
NP	Wetlands/Riparian Zones	The nearest system capable of supporting riparian habitat is the White River which is separated from the project area by over two miles of ephemeral channel. The Proposed Action would have no direct or indirect influence on the White River's riparian resources.
PI	Vegetation	See discussion below.
PI	Invasive, Non-native Species	See discussion below.
NP	Threatened, Endangered, and Sensitive Plant Species	The nearest special status plant population is approximately 15 miles away. The Proposed Action will have no direct or indirect effects on special status plant species.
PI	Threatened, Endangered, and Sensitive Animal Species	See discussion below.
NI	Migratory Birds	Both flowlines are located along existing pipeline rights-of-ways or roadways. Much of the habitat involved is degraded/disturbed and generally does not provide high quality nesting or forage resources for migratory birds. The Proposed Action is not anticipated to have any measureable influence on migratory bird nesting activities.

DETERMINATION OF STAFF:		
Determination	Resource	Rationale for Determination*
NP	Wildlife, Aquatic	The White River, which is separated from the project area by over two miles of ephemeral channel, is the nearest system which supports higher order aquatic vertebrate species. The Proposed Action would have no direct or indirect influence on the Whiter River's aquatic wildlife or associated habitats.
NI	Wildlife, Terrestrial	This heavily developed portion of Coal Oil Basin is inhabited year-round by a small resident herd of pronghorn which are acclimated to routine oil and gas production activities. The proposed waterline and CO ₂ injection line are located adjacent to existing corridors or roadways to minimize disturbance. Although there are no known nests within several miles of the pipeline corridor, raptors may opportunistically forage throughout the project area.
NP	Wild Horses	The Proposed Action is not located within a wild horse management area; therefore there would be no impacts to wild horses.
NP	Cultural Resources	Inventory revealed no cultural resources present. (Darnell 2011, Compliance Dated 3/30/2011)
PI	Paleontology	See discussion below.

NP = not present in the area impacted by the proposed or alternative actions

NI = present, but not affected to a degree that detailed analysis is required

PI = present with potential for impact analyzed in detail in the EA

NATURAL, BIOLOGICAL, AND CULTURAL RESOURCES

SOILS

Affected Environment: The classification of soils that may be impacted by the project and are within 30 meters of the proposed pipelines and the road are shown in Table 2. There are no fragile soils or lands prone to landslides on Federal lands that will be impacted by this project. The Chipeta silty clay loam soils are considered saline with conductivity values above 16 millimhos.

Table 2: Soil Classifications within 30 Meters of the Project

Soil Classification	Range Site Description	Potentially Impacted Acres
Chipeta silty clay loam, 3-25% slopes, eroded	Clayey Saltdesert	7

Environmental Consequences of the Proposed Action: Installing the pipeline will disturb soils due to vegetation clearing and grading, trenching, and heavy equipment traffic during construction and reclamation. Compaction due to construction activities would reduce aeration, permeability, and water-holding capacities of the soils. An increase in surface runoff could be expected from these areas and they are likely to be less resilient to erosion from surface runoff. Impacts off the construction site are not expected because of implementation of best management practices (BMPs) for storm-water, construction practices and reclamation practices.

Direct impacts from the pipeline installation would include removal of vegetation, exposure of the soil, mixing of horizons, compaction, loss of topsoil productivity, and susceptibility to wind and water erosion, and the loss of topsoil productivity. These direct impacts could result in increased indirect impacts such as runoff and erosion. If BMPs for stormwater and reclamation is successful, impacts from this project will be minor and localized to disturbed areas.

There is no description of soil handling procedures during installation of the pipeline. Typical soil handling procedures for these relatively short and small pipelines is to use an excavator to dig a trench with a first out, last in philosophy. Soil handling procedures may concentrate saline soils near the surface and make reclamation difficult and unsuccessful. Salt accumulation on the surface can be observed and is an indication of saline soil conditions that may make reclamation unsuccessful. Mitigation, including reclamation efforts for saline soils, should assure successful reclamation.

The project could result in contamination of surface and subsurface soils due to unintentional leaks or spills and affect the productivity of soils. Typically contaminated soils would be removed and disposed of in a permitted facility or would be bioremediated in place.

Environmental Consequences of the No Action Alternative: No impacts to soils would occur.

Mitigation:

1. All construction activity shall cease when soils or road surfaces become saturated to a depth of three inches unless there are safety concerns or activities are otherwise approved by the Authorized Officer (AO).
2. In order to protect Public Land Health Standards for soils, erosion features such as rilling, gullyng, piping and mass wasting on the surface disturbance or adjacent to the surface disturbance as a result of this action will be addressed immediately after observation by contacting the AO and by submitting a plan to assure successful soil stabilization with BMPs to address erosion problems.
3. If salt is observed on the surface of soils during reclamation activities, the AO will be notified and a plan will be developed with approval of the BLM to improve reclamation on the site.
4. Soil storage areas will be clearly marked to restrict vehicle and construction equipment use to only what is necessary to move the soil.
5. During pipeline construction, the ROW will remain undisturbed to the maximum extent possible. That is, only the minimum necessary disturbance will occur to make the working surface safe and passable. Topsoil will not be removed under areas used for the storage of soils and, if possible, topsoil will not be removed from working surfaces.

6. Under no circumstances will topsoil, soil material below or adjacent to the trench spoils, or subsoil excavated from the trench down to the ERD (Effective Rooting Depth) for the reclamation vegetation (Reclamation ERD) be used as padding in the trench, to fill sacks for trench breakers, or for any other use as construction material. Reclamation ERD will be a minimum of 16 inches and a maximum of 24 inches below the ground surface for all soils.

Finding on the Public Land Health Standard for upland soils: With mitigation this action is unlikely to reduce the productivity of soils impacted by surface disturbing activities.

WASTES, HAZARDOUS OR SOLID

Affected Environment: There are no known hazardous or other solid wastes on the subject lands. No hazardous materials are known to have been used, stored, or disposed of at sites included in the project area.

Environmental Consequences of the Proposed Action: The proposed activities will use regulated materials and will generate some solid wastes. Fuel spills and localized contamination of the site from other hazardous material spills pose the greatest risk for harm to the environment during oil and gas operations.

Environmental Consequences of the No Action Alternative: No impacts to the environment would occur.

Mitigation:

1. The right-of-way holder shall comply with all federal, state and/or local laws, rules, and regulations addressing the emission of and/or the handling, use, and release of any substance that poses a risk of harm to human health or the environment.
2. The holder shall employ, maintain, and periodically update to the best available technology(s) aimed at reducing emissions, fresh water use and hazardous material utilization, production and releases.
3. All substances that pose a risk of harm to human health or the environment shall be stored in appropriate containers. Fluids that pose a risk of harm to human health or the environment, including but not limited to produced water, shall be stored in appropriate containers and in secondary containment systems at 110 percent of the largest vessel's capacity. Secondary fluid containment systems, including but not limited to tank batteries shall be lined with a minimum 24 mil impermeable liner.
4. Where required by law or regulation to develop a plan for the prevention of releases or the recovery of a release of any substance that poses a risk of harm to human health or the environment, provide a current copy of said plan to the Bureau of Land Management's White River Field Office.

5. Construction sites and all facilities shall be maintained in a sanitary condition at all times; waste materials shall be disposed of promptly at an appropriate waste disposal site. "Waste" means all discarded matter including, but not limited to, human waste, trash, garbage, refuse, oil drums, petroleum products, ashes, and equipment.
6. As a reasonable and prudent right-of-way holder, acting in good faith, the holder will report all emissions or releases that may pose a risk of harm to human health or the environment, regardless of a substance's status as exempt or nonexempt and regardless of fault, to the Bureau of Land Management's White River Field Office at (970) 878-3800.
7. As a reasonable and prudent right-of-way holder, acting in good faith, the holder will provide for the immediate clean-up and testing of air, water (surface and/or ground) and soils contaminated by the emission or release of any substance that may pose a risk of harm to human health or the environment, regardless of that substance's status as exempt or non-exempt. Where the holder fails, refuses or neglects to provide for the immediate clean-up and testing of air, water (surface and/or ground) and soils contaminated by the emission or release of any quantity of a substance that poses a risk of harm to human health or the environment, the Bureau of Land Management's White River Field Office may take measures to clean-up and test air, water (surface and/or ground) and soils at the lessee/operator's expense. Such action will not relieve the holder of any liability or responsibility.
8. With the acceptance of this authorization, the commencement of development under this authorization, or the running of thirty calendar days from the issuance of this authorization, whichever occurs first, and during the life of the pipeline, the holder, and through the holder, its agents, employees, subcontractors, successors and assigns, stipulates and agrees to indemnify, defend and hold harmless the United States Government, its agencies, and employees from all liability associated with the emission or release of substances that pose a risk of harm to human health or the environment.

WATER QUALITY, SURFACE AND GROUND (includes a finding on Standard 5)

Affected Environment: This project is in the headwaters of an unnamed ephemeral tributary to the White River. Table 3 describes water segments that may be impacted by this project.

Table 3. Water Quality Classification Table*

Segment	Segment Name	Use Protected	Protected Beneficial Uses		
			Aquatic Life	Recreation	Agriculture
21	Mainstem White River from the confluence with Douglas Creek to the Colorado/Utah Border	No	Warm 1	Existing Primary Contact Use Recreation	Yes
22	All tributaries to the Mainstem White River	No	Warm 2	Primary Contact	Yes

	form the confluence with Douglas Creek to the Colorado/Utah Border			Recreation	
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* Colorado Department Of Public Health And Environment, Water Quality Control Commission, Regulation No. 37 Classifications and Numeric Standards For Lower Colorado River Basin, Effective June 30, 2011

Segment 22 is protected for warm water aquatic life (Warm 2). The warm designation means the classification standards would be protective of aquatic life normally found in waters where the summer weekly average temperatures frequently exceed 20 °C. The Warm 2 designation means that it has been determined that these waters are not capable of sustaining a wide variety of warm water biota. Alternatively the Warm 1 designation for the mainstem of the White River means that aquatic life is supported in this segment. These segments also have standards that are protective of recreation and agriculture. Segment 21 is protected for existing primary use and is typically used for recreational boating.

Environmental Consequences of the Proposed Action: Clearing, grading, and soil stockpiling activities associated with the Proposed Action would alter overland flow and natural groundwater recharge patterns. Potential impacts include concentration of salts in the effective rootzone of reclamation plants and surface soil compaction caused by construction equipment and vehicles, which would likely reduce the soil's ability to absorb water, increasing the volume and rate of surface runoff, which in turn would cause increased surface erosion.

Runoff associated with storm events may increase sediment/salt loads in surface waters down gradient of disturbed areas. Sediment can be deposited and stored in minor drainages where it would be moved into White River during heavy convection storms. Surface erosion for this project will most likely occur during construction of the pipeline corridors and during the installation of the pipelines. Erosion would be mediated using BMPs for stormwater as discussed in the soils section.

The pipeline route includes a perpendicular crossing of an unnamed ephemeral draw. The pipeline should be placed 4 feet below the surface of the active channel (meaning the scour depth that could occur during a flood event). The operator does not specify the depth of this section of the pipeline. If the pipeline is not set deep enough it is likely to be exposed during a flood event at some point in the future. Requiring at least five feet of depth as mitigation will likely avoid this impact.

Environmental Consequences of the No Action Alternative: No impacts identified.

Mitigation:

1. The pipeline will be placed at a minimum of five feet below the current bed of the ephemeral drainage that needs to be crossed to hook into the existing waterline as shown in the Project Diagram.

Finding on the Public Land Health Standard for water quality: It is unlikely that construction of the pipeline corridors and the installation of the pipelines would result in an exceedence of state water quality standards.

VEGETATION (includes a finding on Standard 3)

Affected Environment: The proposed pipelines would be placed entirely within the clayey salt desert range site/ecological site within Coal Oil Basin. This potential natural community (PNC) consists of mat saltbush, green rabbitbrush, bottlebrush squirreltail, Indian ricegrass, galleta, and buckwheat. The proposed project would currently be classified as mid seral and has a component of invasive annuals including cheatgrass. There are areas within Coal Oil Basin that are dominated by early seral annuals and not classified as meeting land health standards; however, this project is still mid-seral with a mix of invasive annuals and cool-season perennials.

Environmental Consequences of the Proposed Action: Installation of the pipelines would require complete removal of vegetation on 0.73 acres. Disturbance of soils where non-native/invasive annuals are present has the potential to increase the density of these undesirable species. In areas of soil and vegetative disturbance, annuals will often be the first to re-establish on the site and will out-compete native grasses and forbs resulting in a mono-culture of non-native annuals. All disturbance associated with the pipelines is considered short-term and proper reclamation using seeded species adapted to the site could pre-empt the establishment of invasive annuals leaving the site with a higher density of native perennials than before the disturbance.

Environmental Consequences of the No Action Alternative: There will be no disturbance to vegetation as a result of the No Action Alternative.

Mitigation:

1. For seed mix and seeding rates, see Attachment 1.
2. All other reclamation should be completed per the site-specific reclamation plan that was submitted with the Sundry Notice for each injection line. For additional guidance refer to the 2011 WRFO Surface Reclamation Protocol.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial): The project area is currently meeting land health standards for plant and animal communities. There is a component of invasive annuals present in the understory that threatens this classification, and implementation of the Proposed Action will create a pathway for annual invasive species to increase. Successful reclamation does have the potential to pre-empt the establishment of invasive annuals, and could improve the vegetative community associated with the Proposed Action.

INVASIVE, NON-NATIVE SPECIES

Affected Environment: This project is proposed in the Coal Oil Basin area northwest of Rangely, Colorado. Noxious weeds that are present within the immediate vicinity of the Proposed Action are cheatgrass (*Bromus tectorum*) and halogeton (*Halogeton glomeratus*). Both of these species are classified as List C species on the state of Colorado noxious weed list. Cheatgrass is a non-native annual that aggressively invades areas of disturbance and often times becomes the dominate vegetation in a community. Halogeton is another non-native annual that readily invades areas of disturbance. Halogeton, while invasive, is not highly competitive and will often be out-competed if areas of disturbance are reclaimed and seeded with species adapted to the site.

Environmental Consequences of the Proposed Action: Implementation of the Proposed Action will require disturbance of soil and vegetation on 0.73 acre. Creating soil disturbance does increase the potential for invasive species to establish and dominate the site upon completion of the project. Since halogeton and cheatgrass are already present in the project area, it is anticipated without good reclamation, they will become dominate on the site. Proper reclamation (i.e., combining the use of herbicides and seeding) will decrease the likelihood of noxious weeds dominating the site and could actually improve the quality of vegetation along the pipeline corridors.

There is also the potential for weed seeds and propogules to be transported onto the site on equipment used during pipeline installation. This could lead to the establishment of new weed species establishing on the area that are not currently on the project site. Early detection and rapid response (EDRR) will be critical to keep these new species from establishing and moving to the adjacent plant communities.

Environmental Consequences of the No Action Alternative: There will be no disturbance to soils and vegetation therefore limiting the possibility of weeds to increase in the area.

Mitigation:

1. For weed monitoring commitments, refer to Attachment 1.
2. The use of herbicides will be under the supervision of an Environmental Protection Agency (EPA) certified applicator.
3. All equipment used for the installation of the pipeline will be washed prior to being brought onto BLM lands.

THREATENED, ENDANGERED, AND SENSITIVE ANIMAL SPECIES (includes a finding on Standard 4)

Affected Environment: The project area is broadly encompassed by white-tailed prairie dog habitat. White-tailed prairie dogs, a BLM sensitive species, and their burrow systems are important components of burrowing owl habitat, as well as potential habitat for reintroduced

populations of black-footed ferret. Burrowing owls, also a BLM sensitive species, are uncommon in this Resource Area. These birds return to occupy a maintained burrow system in early April and begin nesting soon after. Most birds have left the area by September.

Under the auspices of a non-essential, experimental population rule, black-footed ferrets have been released annually in Coyote Basin (8 miles southwest) and Wolf Creek (13 miles northeast) of Rangely Oil Field since 1999 and 2001, respectively. The rule applies to any ferrets that may occupy or eventually be released in northwest Colorado and northeast Utah. Although there is no direct continuity between Coyote Basin or Wolf Creek and the project site (i.e., lesser physical barriers and habitats unoccupied by prairie dog), there is potential for ferrets to colonize and successfully breed in the Rangely Oil Field. Ferrets are wholly reliant on prairie dogs for food and shelter. Ferret breeding activities begin in early March, with birthing beginning in early May. Young ferrets generally begin to emerge by mid-July. There have been no verified sightings of ferrets, nor any known reproduction occurring in the Rangely Oil Field.

Brewer's sparrow, a BLM sensitive species, is common throughout the oil field where appropriate habitat exists (i.e., sagebrush communities). This species typically returns in late April and May and begins nesting in earnest in the latter part of May. Young are fledged by mid to late July.

Ferruginous hawks may opportunistically forage throughout the area; however there are no known active nests within several miles of the project area.

Environmental Consequences of the Proposed Action: This project would have no short or long term influence on prairie dog abundance or distribution by itself or as habitat for black-footed ferret or burrowing owl. The Proposed Action has relatively minor involvement with prairie dog burrow systems. It is highly unlikely that any subsurface disturbance associated with the Proposed Action would intersect a prairie dog burrow system occupied by a ferret. The nearest known burrowing owl nest is located approximately 0.70 mile from the project area. Pipeline installation would have no conceivable influence on nesting burrowing owls or important habitat. Prompt and effective pipeline reclamation would provide an herbaceous component that would benefit white-tailed prairie dogs, their associates, and other resident wildlife.

The vegetation communities that are involved with the Proposed Action are predominately salt desert shrub vegetation types which typically do not provide suitable nesting habitat for Brewer's sparrow. Any involvement with sagebrush vegetation types would be nominal.

Environmental Consequences of the No Action Alternative: There would be no potential influence on prairie dogs or their burrowing systems as habitat for burrowing owl, ferruginous hawk, and black-footed ferret in the case of a No Action Alternative.

Mitigation: None.

Finding on the Public Land Health Standard for Threatened & Endangered species: Public Land Health Standards for those special status species associated with white-tailed prairie dogs, including black-footed ferret, ferruginous hawk and burrowing owl, in the Rangely Oil

Field are currently met. This project would have no adverse influence on populations, available extent of suitable habitat, or the reproductive activities of these three species. Thus, there would be no influence on meeting the land health standard. Small incremental gains in perennial grass cover associated with successful reclamation and subsurface tillage associated with flowline installation may be expected to bolster local populations of prairie dogs and potentially benefit individual burrowing owl and black-footed ferret—effects consistent with continued meeting of the land health standards.

PALEONTOLOGY

Affected Environment: The proposed project is in an area generally mapped as the Cretaceous Mancos Shale Formation (Tweto 1979) which is known to produce a variety of marine invertebrates and vertebrate fossils (e.g. sharks, mosasaurs and plesiosaurs) though no vertebrate fossil have been reported from the formation near Rangely, Colorado to date. Invertebrates have been reported in the area.

Environmental Consequences of the Proposed Action: There is a possibility, though low probability, that fossil resources could be impacted by the project. Discovery of vertebrate fossils could be a significant find and could be considered a serious impact. Recovery would reduce the loss of scientific data from the find.

Environmental Consequences of the No Action Alternative: There would be no impacts of any kind to fossil resources under the No Action Alternative.

Mitigation:

1. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing paleontological sites, or for collecting fossils. If fossil materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear to be of noteworthy scientific interest
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not feasible)

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

ELEMENTS NOT PRESENT OR NOT AFFECTED:

No flood plains or prime and unique farmlands exist within the area affected by the Proposed Action. There are also no Native American religious or environmental justice concerns associated with the Proposed Action.

OTHER ELEMENTS: For the following elements, only those brought forward for analysis will be addressed further.

Other Elements	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Visual Resources			X
Fire Management		X	
Forest Management	X		
Hydrology/Water Rights		X	
Rangeland Management		X	
Realty Authorizations	X		
Recreation		X	
Access and Transportation		X	
Geology and Minerals		X	
Areas of Environmental Concern	X		
Wilderness	X		
Wild and Scenic Rivers	X		
Cadastral	X		
Socio-Economics		X	
Law Enforcement		X	

VISUAL RESOURCES

Affected Environment: The Proposed Action would be located in an area with a Visual Resource Management (VRM) IV classification. The objective of this class is to provide for management activities which allow for major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high. These management activities may dominate the view and be the major focus of viewer attention. However, every attempt should be made to minimize the impact of these activities through careful location, minimal disturbance, and repeating the basic elements. The area of the Proposed Action possesses a highly modified visual character from previous energy and industrial development.

Environmental Consequences of the Proposed Action: The proposed pipeline construction would require the removal of the vegetation which would create contrast in line and color. The contrast will be greatest during construction activities due to the exposed dirt but will gradually reduce in contrast as reclamation efforts, through recontouring and seeding, establish a grass community that will begin to blend with the surrounding vegetation. The Proposed Action would not dominate the view nor result in major modification of the existing character of the landscape. The level of change to the characteristic landscape would be low and the objectives of the VRM IV classification would be retained.

Environmental Consequences of the No Action Alternative: There would be no additional ground disturbance evident to the casual observer.

Mitigation: None.

CUMULATIVE IMPACTS SUMMARY: This action is consistent with the scope of impacts addressed in the White River EIS. The cumulative impacts of energy-related development are addressed in the White River ROD/RMP for each resource value that would be affected by the Proposed Action. The short-term duration of activity and of impacts would result in negligible cumulative impacts for most resources and no long-term cumulative impacts following cessation and reclamation of the proposed project.

REFERENCES CITED:

Armstrong, Harley J., and David G. Wolny
1989 Paleontological Resources of Northwest Colorado: A Regional Analysis. Museum of Western Colorado, Grand Junction, Colorado.

Darnell, Nicole
2011 Class III Cultural Resources Inventory for the Levison #8 Proposed 3" CO₂ & 3" WTR INF (~1511 feet) in Rio Blanco County, Colorado for Chevron, Inc. Grand River Institute, Grand Junction, Colorado.

Tweto, Ogden
1979 Geologic Map of Colorado. United States Geologic Survey, Department of the Interior, Reston, Virginia.

PERSONS / AGENCIES CONSULTED: None.

INTERDISCIPLINARY REVIEW:

Name	Title	Area of Responsibility	Date Signed
Bob Lange	Hydrologist	Air Quality, Water Quality, Surface and Ground Hydrology and Water Rights, Soils	7/12/2011
Zoe Miller	Ecologist	Areas of Critical Environmental Concern, Threatened and Endangered Plant Species	6/23/2011

Name	Title	Area of Responsibility	Date Signed
Michael Selle	Archeologist	Cultural Resources, Paleontological Resources	3/31/2011
Matt Dupire	Rangeland Management Specialist	Invasive, Non-Native Species, Vegetation , Rangeland Management	6/20/2011
Lisa Belmonte	Wildlife Biologist	Migratory Birds, Threatened, Endangered and Sensitive Animal Species, Terrestrial and Aquatic Wildlife, Wetlands and Riparian Zones	6/21/2011
Christi Barlow	Natural Resource Specialist/HazMat Coordinator	Wastes, Hazardous or Solid	6/20/2011
Chad Schneckenburger	Outdoor Recreation Planner	Wilderness, Access and Transportation, Recreation, Visual Resources	6/20/2011
Jim Michels	Supervisory Natural Resource Specialist / Forester	Forest Management	6/22/2011
Garner Harris	Zone Fire Management Officer	Fire Management	5/27/2011
Paul Daggett	Mining Engineer	Geology and Minerals	6/24/2011
Linda Jones	Realty Specialist	Realty Authorizations	3/30/2011
Melissa J. Kindall	Range Technician	Wild Horses	7/5/2011

Finding of No Significant Impact/Decision Record (FONSI/DR)

DOI-BLM-CO-110-2010-0085-EA

FINDING OF NO SIGNIFICANT IMPACT (FONSI)/RATIONALE: The environmental assessment and analysis of the environmental effects of the Proposed Action have been reviewed. The approved mitigation measures (listed below) result in a Finding of No Significant Impact on the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the Proposed Action.

DECISION: It is my decision to approve the construction, operation, and maintenance of the CO₂ and water injection lines as described in the Proposed Action.

MITIGATION MEASURES:

1. All construction activity shall cease when soils or road surfaces become saturated to a depth of three inches unless there are safety concerns or activities are otherwise approved by the Authorized Officer (AO).
2. In order to protect Public Land Health Standards for soils, erosion features such as rilling, gully, piping and mass wasting on the surface disturbance or adjacent to the surface disturbance as a result of this action will be addressed immediately after observation by contacting the AO and by submitting a plan to assure successful soil stabilization with BMPs to address erosion problems.
3. If salt is observed on the surface of soils during reclamation activities the AO will be notified and a plan will be developed with approval of the BLM to improve reclamation on the site.
4. Soil storage areas will be clearly marked to restrict vehicle and construction equipment use to only what is necessary to move the soil.
5. During pipeline construction, the ROW will remain undisturbed to the maximum extent possible. That is, only the minimum necessary disturbance will occur to make the working surface safe and passable. Topsoil will not be removed under areas used for the storage of soils and, if possible, topsoil will not be removed from working surfaces.
6. Under no circumstances will topsoil, soil material below or adjacent to the trench spoils, or subsoil excavated from the trench down to the ERD (Effective Rooting Depth) for the reclamation vegetation (Reclamation ERD) be used as padding in the trench, to fill sacks for trench breakers, or for any other use as construction material. Reclamation ERD will be a minimum of 16 inches and a maximum of 24 inches below the ground surface for all soils.

7. The right-of-way holder shall comply with all federal, state and/or local laws, rules, and regulations addressing the emission of and/or the handling, use, and release of any substance that poses a risk of harm to human health or the environment.
8. The holder shall employ, maintain, and periodically update to the best available technology(s) aimed at reducing emissions, fresh water use and hazardous material utilization, production and releases.
9. All substances that pose a risk of harm to human health or the environment shall be stored in appropriate containers. Fluids that pose a risk of harm to human health or the environment, including but not limited to produced water, shall be stored in appropriate containers and in secondary containment systems at 110 percent of the largest vessel's capacity. Secondary fluid containment systems, including but not limited to tank batteries shall be lined with a minimum 24 mil impermeable liner.
10. Where required by law or regulation to develop a plan for the prevention of releases or the recovery of a release of any substance that poses a risk of harm to human health or the environment, provide a current copy of said plan to the Bureau of Land Management's White River Field Office.
11. Construction sites and all facilities shall be maintained in a sanitary condition at all times; waste materials shall be disposed of promptly at an appropriate waste disposal site. "Waste" means all discarded matter including, but not limited to, human waste, trash, garbage, refuse, oil drums, petroleum products, ashes, and equipment.
12. As a reasonable and prudent right-of-way holder, acting in good faith, the holder will report all emissions or releases that may pose a risk of harm to human health or the environment, regardless of a substance's status as exempt or nonexempt and regardless of fault, to the Bureau of Land Management's White River Field Office at (970) 878-3800.
13. As a reasonable and prudent right-of-way holder, acting in good faith, the holder will provide for the immediate clean-up and testing of air, water (surface and/or ground) and soils contaminated by the emission or release of any substance that may pose a risk of harm to human health or the environment, regardless of that substance's status as exempt or non-exempt. Where the holder fails, refuses or neglects to provide for the immediate clean-up and testing of air, water (surface and/or ground) and soils contaminated by the emission or release of any quantity of a substance that poses a risk of harm to human health or the environment, the Bureau of Land Management's White River Field Office may take measures to clean-up and test air, water (surface and/or ground) and soils at the lessee/operator's expense. Such action will not relieve the holder of any liability or responsibility.
14. With the acceptance of this authorization, the commencement of development under this authorization, or the running of thirty calendar days from the issuance of this authorization, whichever occurs first, and during the life of the pipeline, the holder, and through the holder, its agents, employees, subcontractors, successors and assigns, stipulates and agrees to

indemnify, defend and hold harmless the United States Government, its agencies, and employees from all liability associated with the emission or release of substances that pose a risk of harm to human health or the environment.

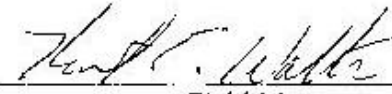
15. The pipeline will be placed at a minimum of five feet below the current bed of the ephemeral drainage that needs to be crossed to hook into the existing waterline as shown in the Project Diagram.
16. The use of herbicides will be under the supervision of an Environmental Protection Agency (EPA) certified applicator.
17. All equipment used for the installation of the pipeline will be washed prior to being brought onto BLM lands.
18. All other reclamation should be completed per the site-specific reclamation plan that was submitted with the Sundry Notice for each injection line. For additional guidance refer to the 2011 WRFO Surface Reclamation Protocol.
19. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for disturbing or collecting vertebrate fossils, collecting large amounts of petrified wood (over 25lbs./day, up to 250lbs./year), or collecting fossils for commercial purposes on public lands.
20. If any paleontological resources are discovered as a result of operations under this authorization, the operator or any of his agents must stop work immediately at that site, immediately contact the BLM Paleontology Coordinator, and make every effort to protect the site from further impacts, including looting, erosion, or other human or natural damage. Work may not resume at that location until approved by the AO. The BLM or designated paleontologist will evaluate the discovery and take action to protect or remove the resource within 10 working days. Within 10 days, the operator will be allowed to continue construction through the site, or will be given the choice of either (a) following the Paleontology Coordinator's instructions for stabilizing the fossil resource in place and avoiding further disturbance to the fossil resource, or (b) following the Paleontology Coordinator's instructions for mitigating impacts to the fossil resource prior to continuing construction through the project area.

COMPLIANCE/MONITORING: On-going compliance inspections and monitoring will be conducted by the BLM White River Field Office staff during and after construction. Specific mitigation developed in this document will be followed. The operator will be notified of compliance related issues in writing, and depending on the nature of the issue(s), will be provided 30 days to resolve such issues.

NAME OF PREPARER: Brett Smithers

NAME OF ENVIRONMENTAL COORDINATOR: Heather Sauls

SIGNATURE OF AUTHORIZED OFFICIAL:


Field Manager

DATE SIGNED:

08/24/2011

ATTACHMENTS: Attachment 1: Plan for surface reclamation of pipeline rights-of-ways.
Figure 1: Project area map.
Figure 2: Project diagram.

Attachment 1

Surface Use Plan of Operations Plan for Surface Reclamation of Pipeline right of ways.

I. Reclamation Objectives:

The long-term objective of final reclamation is to return the land to a condition approximating that which existed prior to disturbance. This includes restoration of the landform, hydrologic systems, visual resources, wildlife habitats, and establishment of desired vegetative community. To ensure that the long-term objective will be reached through human and natural processes, actions will be taken to ensure standards are met for site stability, visual quality, hydrological functioning, and vegetative productivity.

II. Reclamation Performance Standards

The following reclamation performance standards will be met:

Reclamation – Includes disturbed areas where the original landform and a natural vegetative community have been restored and it is anticipated the site will not be redisturbed for future development.

- Reclamation will be judged successful when the BLM authorized officer determines that:
 - The original contour, or one which blends with the surrounding landform, has been restored for all disturbed areas including well pads, production facilities, roads, pipelines, and utility corridors.
 - A self-sustaining, vigorous, diverse, desired plant community is established on the site, with a density sufficient to control erosion and invasion by non-native plants and to reestablish wildlife habitat or forage production. At a minimum, the established plant community will consist of species included in the seed mix and/or desirable species occurring in the surrounding natural vegetation.
 - In agricultural areas, irrigation systems and soil conditions are reestablished in such a way as to ensure successful cultivation and harvesting of crops.
 - Erosion features are equal to or less than surrounding area and erosion control is sufficient so that water naturally infiltrates into the soil and gulying, headcutting, slumping, and deep or excessive rills (greater than 3 inches) are not observed.
 - The site is free of State- or county-listed noxious weeds, oil field debris and equipment, and contaminated soil. Invasive, non-native, and undesirable weeds are controlled.

III. Reclamation Actions (Minimum)

The following minimum reclamation actions will be taken to ensure that the reclamation objectives and standards are met. It may be necessary to take additional reclamation actions beyond the minimum in order to achieve the Reclamation Standards.

Reclamation - General

Notification:

- The BLM WRFO *designated Natural Resource Specialist* be notified at least 24 hours prior to commencement of any reclamation operations.

Vegetation Clearing:

- Grass, forbs, and small woody vegetation, such as sagebrush will be excavated as the topsoil is removed.
- Large woody vegetation will be stripped and stored separately and respread evenly on the site following topsoil respreading.

Topsoil Management:

- Operations will disturb the minimum amount of surface area necessary to conduct safe and efficient operations.
- Topsoil depth is defined as the top layer of soil that contains 80% of the roots. In areas to be heavily disturbed, the top [six (6)] inches of soil material, will be stripped and stockpiled. Topsoil will be clearly segregated and stored separately from subsoils.
- On sites where there is not at least an average of 6 inches of topsoil across the site available for stockpiling, soil amendments will be used to augment the available topsoil and improve plant germination and growth. Soil amendments will be [determined as part of the reclamation pre-assessment, and] agreed to by both the operator and the BLM prior to disturbing the site.
- Earthwork for reclamation will be completed within 9 months of surface work unless a delay is approved *in writing* by the BLM authorized officer.
- Salvaging and spreading topsoil will not be performed when the ground or topsoil is frozen or too wet to adequately support construction equipment or so dry that dust clouds greater than 30 feet tall are created. If such equipment creates ruts in excess of three (3) inches deep, the soil will be deemed too wet.
- No major depressions will be left that would trap water and cause ponding unless the intended purpose is to trap runoff and sediment.

Seeding:

- Seedbed Preparation. Initial seedbed preparation will consist of recontouring to the appropriate interim or final reclamation standard. All compacted areas to be seeded will be ripped to a minimum depth of 18 inches with a minimum furrow spacing of 2 feet, followed by recontouring the surface and then evenly spreading the stockpiled topsoil.

Prior to seeding, the seedbed will be scarified to a depth of no less than 4 - 6 inches. If the site is to be broadcast seeded, the surface will be left rough enough to trap seed and snow, control erosion, and increase water infiltration .

- If broadcast seeding is to be used and is delayed, final seedbed preparation will consist of contour cultivating to a depth of 4 to 6 inches within 24 hours prior to seeding, dozer tracking, or other imprinting in order to break the soil crust and create seed germination micro-sites.
- Seed Application. Seeding will be conducted no more than two weeks following completion of final seedbed preparation. A certified weed-free seed mix designed by the BLM (shown below) to meet reclamation standards will be used. The following seed mix and rates will be used on all disturbed surfaces, including pipelines and road cut & fill slopes:

Variety	Common Name	Scientific Name	Rate (lbs. PLS/acre)
Viva Florets	Galleta Grass	<i>Pleuraphis jamesii</i>	3
Rimrock	Indian Ricegrass	<i>Achnatherum hymenoides</i>	3
Toe Jam Creek	Bottlebrush Squireltail	<i>Elymus elymoides</i>	2.5
Rosana	Western Wheatgrass	<i>Pascopyrum smithii</i>	4
	Scarlet Globemallow	<i>Sphaeralcea coccinea</i>	0.25
	Annual Sunflower	<i>Helianthus annuus</i>	2.5
	Mat Saltbush	<i>Atriplex corrugata</i>	2

- The application rate shown in the table is based on 50 pure live seeds (PLS) per square foot, drill-seeded to no greater a depth than 0.25 inch. {*However, shrub species will be seeded during the winter on the ground surface or preferably on top of snow*}. In areas that will not be drill-seeded, the seed mix will be drop seeded or broadcast-seeded on surface roughened sites at twice the application rate shown in the table. If the site is harrowed or dragged, seed will be covered by no more than 0.25 inch of soil.
- No seeding will occur from March 15 to September 1. Fall seeding is preferred and will be conducted after September 1 and prior to ground freezing. Shrub species will be seeded separately and will be seeded during the winter. Spring seeding is less desirable and will be conducted after the frost leaves the ground and no later than March 15.

Erosion Control and Mulching:

- Where applicable, the mitigation techniques such as surface roughening and mulching will be used to keep water on site, thereby enhancing re-vegetation of the site and controlling erosion and runoff.
- All erosion control devices and materials will be installed and maintained to be fully functional until revegetation is determined successful by the BLM.

- Silt fencing, wattles, hay bales, and other erosion control devices will be used on were necessary to prevent soil movement from water erosion.
- Mulch will be used if necessary to control wind and water erosion, create vegetation micro-sites, and retain soil moisture on site. Mulches may include native grass hay, small-grain straw, wood fiber, live mulch, cotton, jute, or synthetic netting. Mulch will be certified free of noxious or invasive weed seeds and free from mold and fungi.
- If loose straw or hay mulch is used, it will be crimped into the soil to prevent blowing.

Management of Invasive, Noxious, and Undesirable Species:

- All reclamation equipment will be cleaned prior to use to reduce the potential for introduction of noxious weeds or other undesirable non-native species.
- An intensive and documented weed monitoring and control program will be implemented prior to site preparation for planting and will continue until final reclamation is approved by the BLM.
- Each site where the BLM has not approved interim or final reclamation success will be monitored annually to determine the presence of any invasive, noxious, and undesirable species. Invasive, noxious, and undesirable species that have been identified during monitoring will be promptly treated and controlled, prior to the production of seed heads. A Pesticide Use Proposal (PUP) will be submitted to the BLM for approval prior to the use of herbicides.

Final Reclamation Procedures - Specific

- All disturbed areas, including roads, pipeline right of ways will be recontoured to the contour existing prior to initial construction or a contour that blends indistinguishably with the surrounding landscape. Re salvaged topsoil will be respread evenly over the entire disturbed site to ensure successful revegetation. To help mitigate the contrast of recontoured slopes, reclamation will include measures to feather cleared lines of vegetation and to save and redistribute cleared trees, woody debris, and large rocks over recontoured cut and fill slopes.
- Stormwater management structures and drainage features (i.e. culverts and ditches) will only be installed when absolutely necessary to prevent erosion of fill material. Stormwater management structures and drainage features are not permanent features and will be removed and reseeded when the rest of the site is successfully revegetated and stabilized.
- To ensure timely revegetation, the pad will be fenced to the BLM's standards to exclude livestock grazing for the first two growing seasons or until seeded species become firmly established, whichever comes later. Fencing will meet standards found on page 18 of the Gold Book, 4th Edition, or will be fenced with operational electric fencing.
- Final abandonment of pipelines and flowlines will involve flushing and properly disposing of any fluids in the lines. All surface lines and any lines that are buried close to the surface that may become exposed in the foreseeable future due to water or wind

erosion, soil movement, or anticipated subsequent use, must be removed. Deeply buried lines may remain in place unless otherwise directed by the authorized officer.

Reclamation Monitoring and Final Abandonment Approval

- Reclaimed areas will be monitored annually. Actions will be taken to ensure that reclamation standards are met as quickly as reasonably practical and are maintained during the life of the permit.
- The designated WRFO Natural Resource Specialist will be notified via email or by phone 24 hours prior to beginning all reclamation activities associated with this project. Reclamation activities may include, but are not limited to, seed bed preparation that requires disturbance of surface soils, seeding, constructing exclosures (e.g., fences) to exclude livestock from reclaimed areas.
- All seed tags will be submitted via Sundry Notice to the designated Natural Resource Specialist within 14 calendar days from the time the seeding activities have ended. The sundry will include the purpose of the seeding activity (i.e., seeding well pad cut and fill slopes, seeding pipeline corridor, etc.). In addition, the SN will include the well or well pad number associated with the seeding activity, if applicable, the name of the contractor that performed the work, his or her phone number, the method used to apply the seed (e.g., broadcast, hydro-seeded, drilled), whether the seeding activity represents interim or final reclamation, an estimate of the total acres seeded, an attached map that clearly identifies all disturbed areas that were seeded, and the date the seed was applied.
- The operator will meet with the WRFO reclamation staff in March or April of each calendar year and present a comprehensive work plan. The purpose of the plan is to provide information pertaining to reclamation activities that are expected to occur during the current growing season. The operator will also provide a map that shows all reclamation sites where some form of reclamation activity is expected to occur during the current growing season.
- A Reclamation Status Report will be submitted electronically via email and as a hard-copy to WRFO Reclamation Coordinator. The hardcopy will be submitted to:

BLM, White River Field Office
220 East Market Street
Meeker, Colorado 81641
Attn: Reclamation Coordinator

The Reclamation Status Report will be submitted annually for all actions that require disturbance of surface soils on BLM-administered lands as a result of the Proposed Action. Actions may include, but are not limited to, well pad and road construction, construction of ancillary facilities, or power line and pipeline construction. The Reclamation Status Report will be submitted by September 30th of each calendar year, and will include the well number, API number, legal description, UTM coordinates (using the NAD83 datum, Zone 13N coordinate system), project description (e.g., well pad, pipeline, etc.), reclamation status (e.g., Phase I Interim, Phase II Interim, or Final), whether the well pad or pipeline has been re-vegetated and/or re-contoured, percent of the

disturbed area that has been reclaimed, method used to estimate percent area reclaimed (e.g., qualitative or quantitative), technique used to estimate percent area reclaimed (e.g., ocular, line-intercept, etc.), date seeded, photos of the reclaimed site, estimate of acres seeded, seeding method (e.g., broadcast, drilled, hydro-seeded, etc.), and contact information for the person(s) responsible for developing the report. The report will be accompanied with maps and GIS data showing each discrete point (i.e., well pad), polygon (i.e., area where seed was applied for Phase I and/or Phase II interim reclamation or area reclaimed for final reclamation), or polyline (i.e., pipeline) feature that was included in the report. Geospatial data shall be submitted: for each completed activity electronically to the designated BLM staff person responsible for the initial request and in accordance with WRFO geospatial data submittal standards (available from WRFO GIS Staff, or on the WRFO website). Internal and external review of the WRFO Reclamation Status Report, and the process used to acquire the necessary information will be conducted annually, and new information or changes in the reporting process will be incorporated into the report.

- In an attempt to track final reclamation of federal actions related to the development of federal mineral resources, the operator shall provide the *designated Natural Resource Specialist* with geospatial data in a format compatible with the WRFO's ESRI ArcGIS Geographic Information System (GIS). These data will be used to accurately locate and identify all geographic as-built (i.e., constructed) features associated with this project and included in the Application for Permit to Drill (APD) or Sundry Notice (SN), as appropriate. These data shall be submitted within 60 days of construction completion. If the operator is unable to submit the required information within the specified time period, the operator shall notify the designated Natural Resource Specialist via email or by phone, and provide justification supporting an extension of the required data submission time period. GIS polygon features may include, but are not limited to, constructed access roads, existing roads that were upgraded, pipeline corridors, and well pad footprints. Acceptable data formats are: (1) corrected global positioning system (GPS) files with sub-meter accuracy or better; (2) ESRI shapefiles or geodatabases; or, (3) AutoCAD .dwg or .dxf files. If possible, both (2) and (3) should be submitted for each as-build feature. Geospatial data must be submitted in UTM Zone 13N, NAD 83, in units of meters. Data may be submitted as: (1) an email attachment; or (2) on a standard compact disk (CD) in compressed (WinZip only), or uncompressed format. All data shall include metadata, for each submitted layer, that conforms to the *Content Standards for Digital Geospatial Metadata* from the Federal Geographic Data Committee standards. Questions shall be directed to WRFO BLM GIS staff at (970) 878-3800.

If the data is unable to be sent electronically, a compact disk(s) containing the data will be sent to:

BLM, White River Field Office
Attn: NRS Staff
220 East Market Street
Meeker, Colorado 81641

If for any reason the location or orientation of the geographic feature associated with the Proposed Action changes, the operator will submit updated GIS data to designated BLM

NRS staff person within 7 calendar days of the change. This information will be submitted via Sundry Notice.

- The authorized officer will be informed when reclamation has been completed, appears to be successful, and the site is ready for final inspection.

Figure 1: Project Map

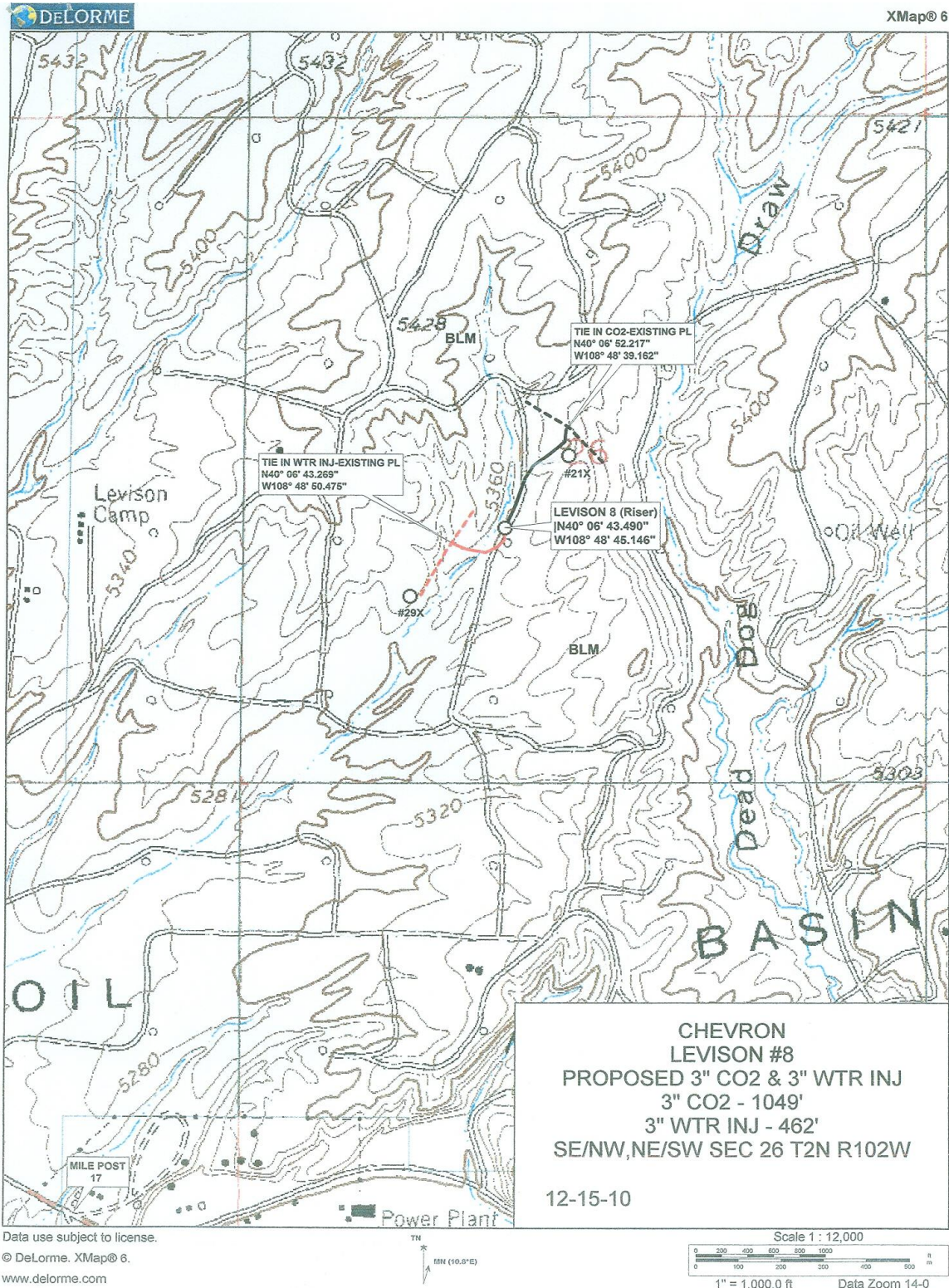


Figure 2: Project Diagram

